STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
300 W. Preston Street, Suite 202, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

Office of Preparedness & Response
Sherry Adams, R.N., C.P.M, Director
Isaac P. Ajit, M.D., M.P.H., Deputy Director

May 26, 2011

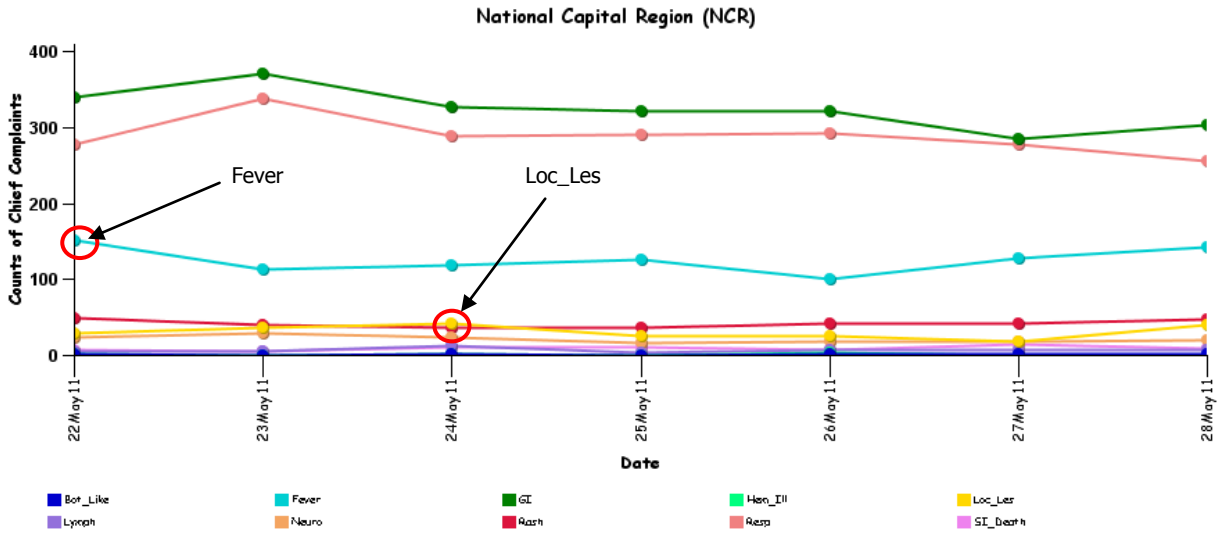
Public Health & Emergency Preparedness Bulletin: # 2011:21
Reporting for the week ending 05/28/11 (MMWR Week #21)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

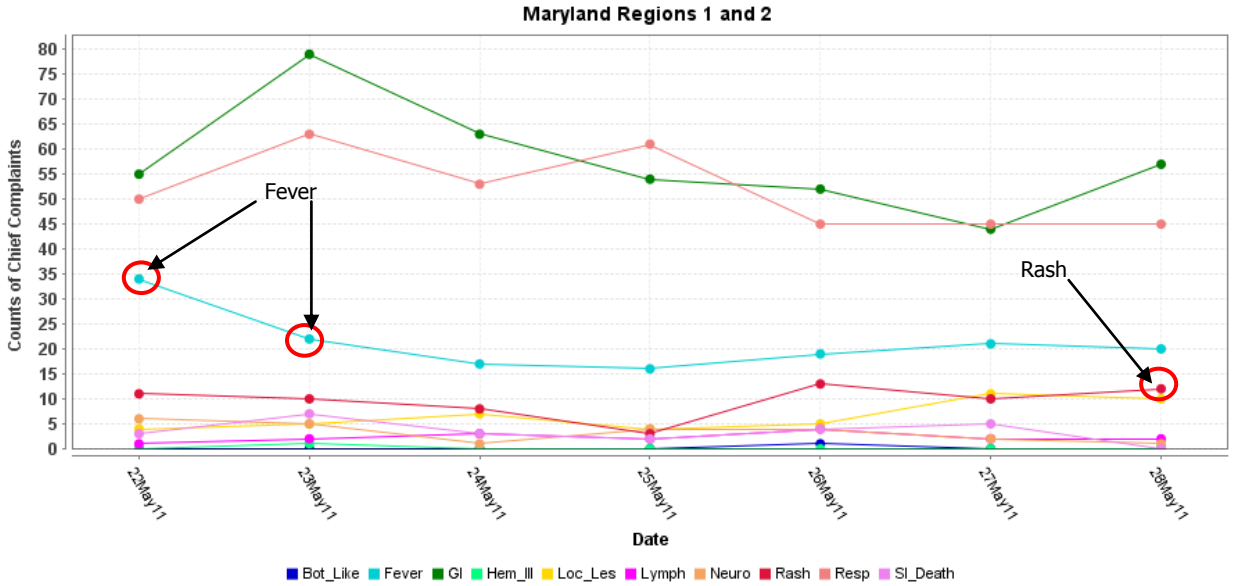
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

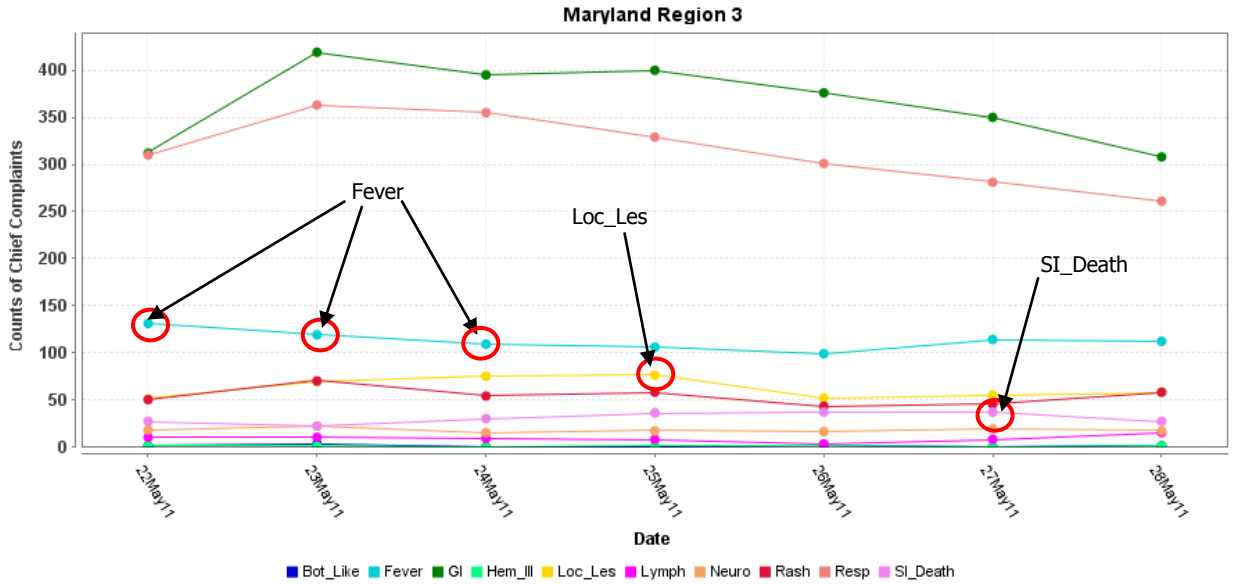


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

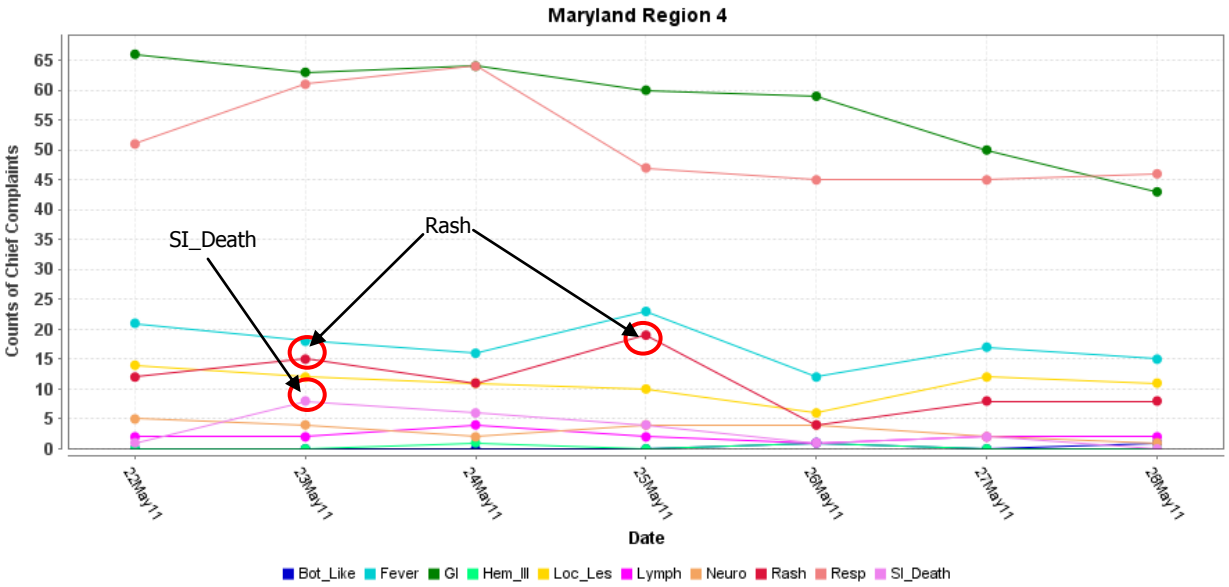
MARYLAND ESSENCE:



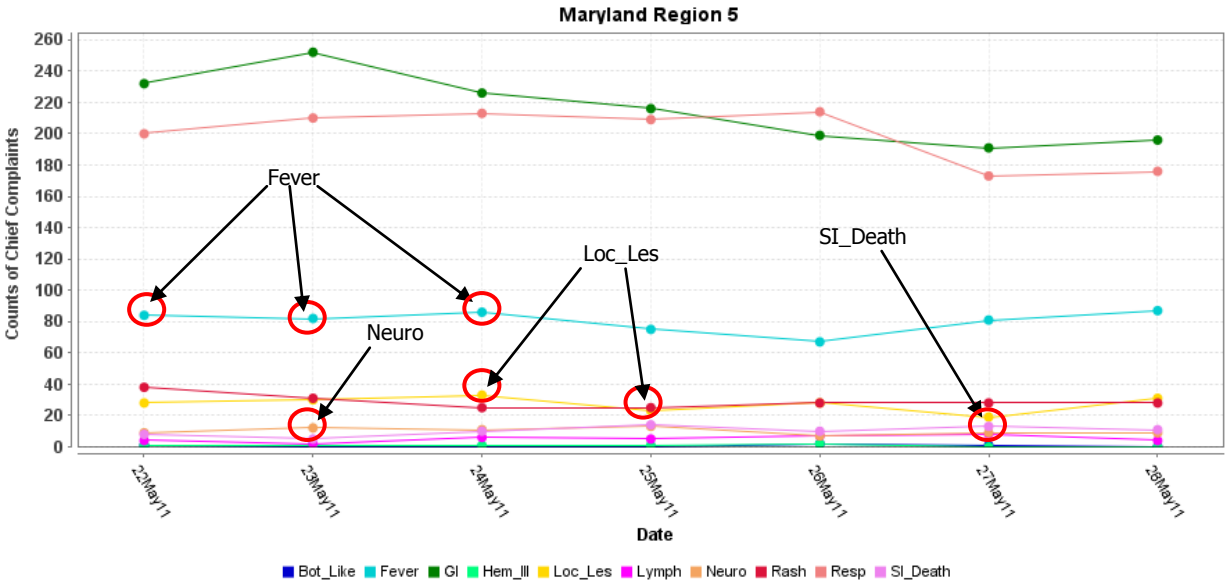
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



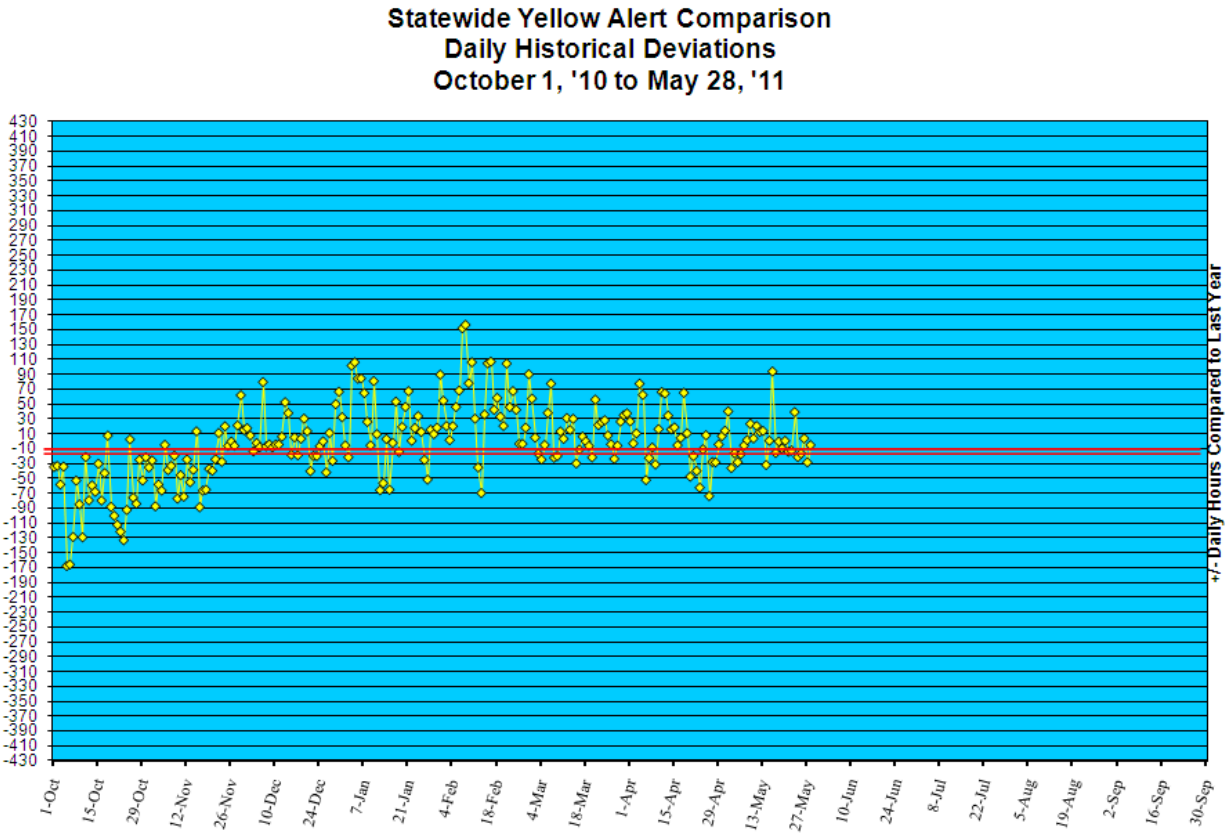
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in April 2011 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (May 22 – May 28, 2011):	11	0
Prior week (May 15 – May 21, 2011):	10	0
Week#21, 2010 (May 23 – May 29, 2010):	13	0

2 outbreaks were reported to DHMH during MMWR Week 21 (May 22-28, 2011).

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS in an Assisted Living Facility

1 Foodborne outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Restaurant

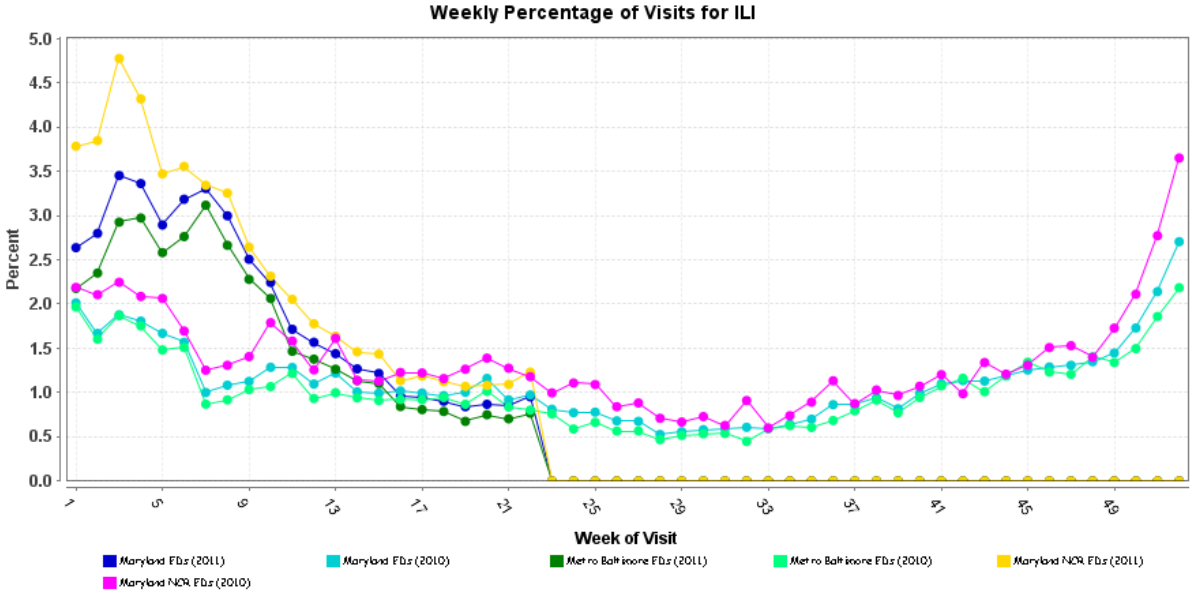
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

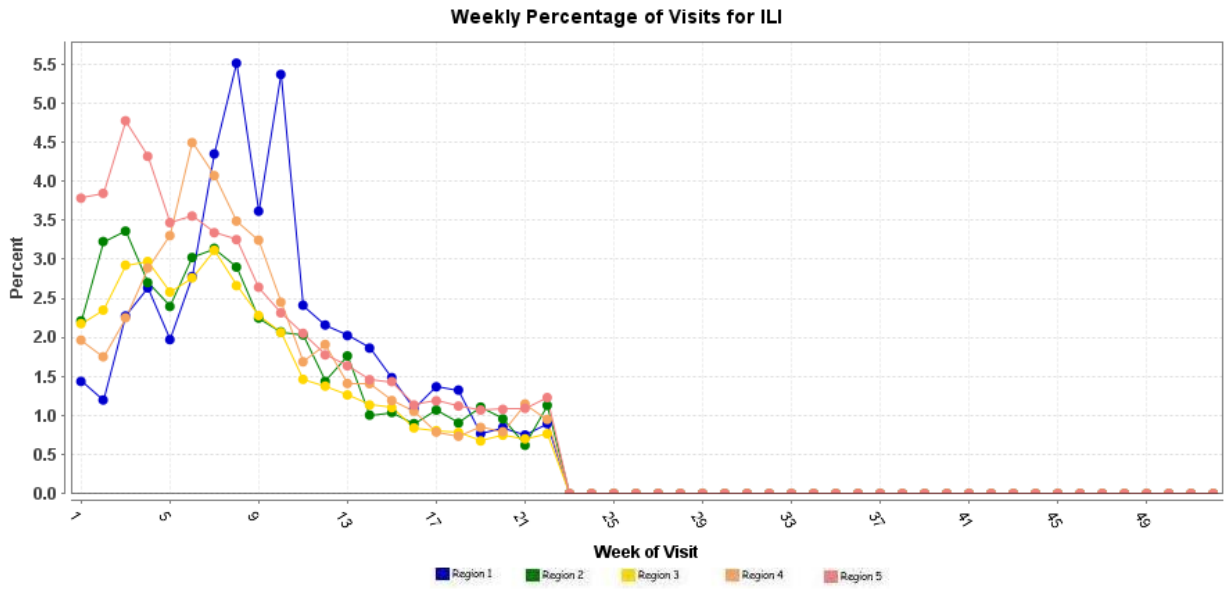
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



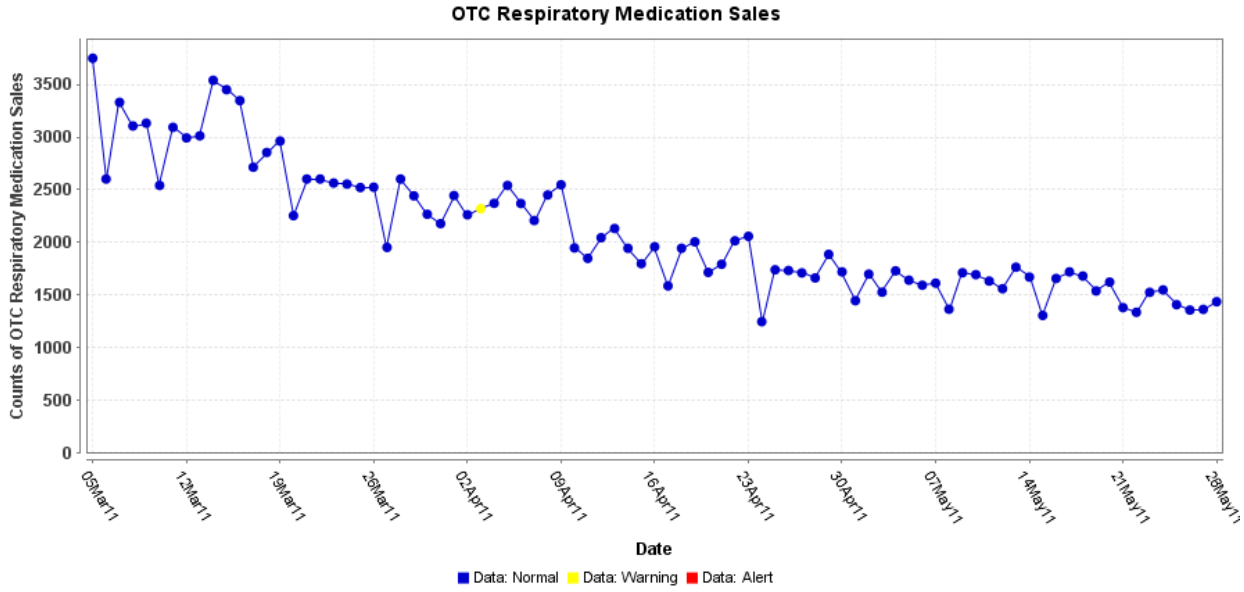
* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

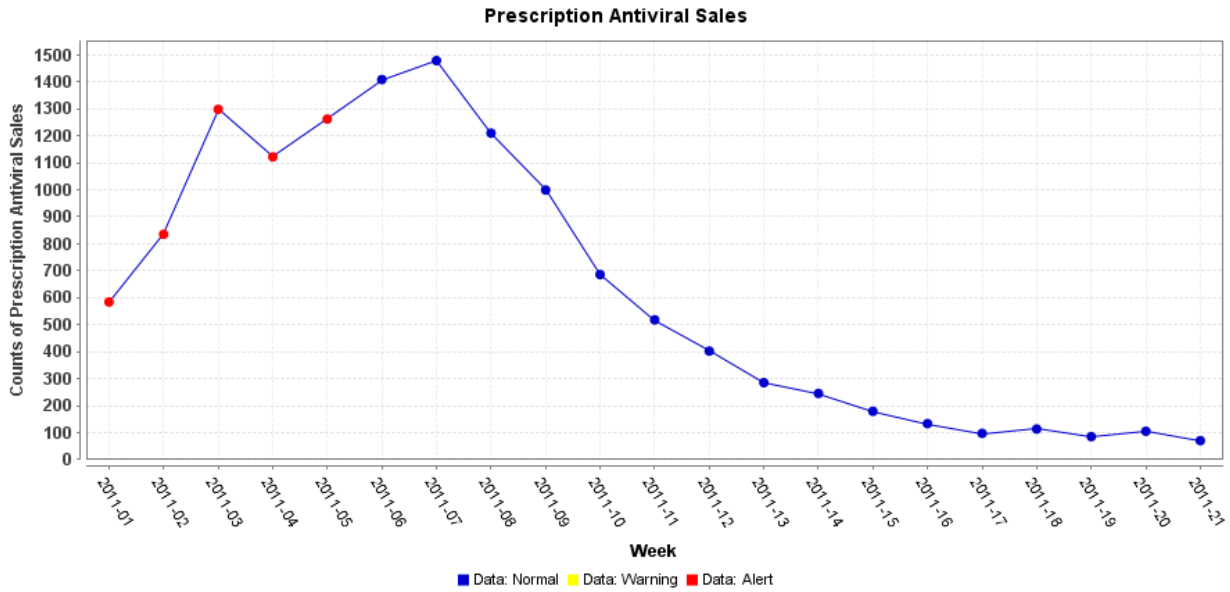
OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PRESCRIPTION ANTIVIRAL SALES:

Graph shows the weekly number of prescription antiviral sales in Maryland.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of May 13, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 553, of which 323 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 58%.

AVIAN INFLUENZA, VACCINE EFFICACY (VIET NAM): 27 May 2011, The Vietnamese government said it had halted the nationwide vaccination of poultry against bird flu, saying a new type of the H5N1 virus had rendered the vaccine ineffective. "Based on post-vaccination surveillance results, a new clade of the H5N1 virus has appeared in Viet Nam since 2010," the government said in a statement issued late on Thursday [26 May 2011]. Viet Nam had planned to use a vaccine imported from China for its vaccination this year, but the vaccine did not work against the new variety, the Animal Health Department said. The new type has been circulating in northern provinces, coastal provinces in the central region as well as in the Central Highlands, it said. The old type of the virus remains active in southern provinces, it said in a report this week. Viet Nam 1st detected the H5N1 virus in poultry in 2003. The virus has since infected 553 people in 15 countries and killed 323, most of them in Asia, including 59 in Viet Nam, based on a World Health Organization tally. Health experts fear the disease could mutate to a form that could be easily transmitted between humans. Almost all of the human H5N1 infections to date are believed to have passed from birds to humans. Viet Nam has detected no human cases of bird flu in 2011 but several provinces across the country have reported outbreaks in ducks and chickens.

NATIONAL DISEASE REPORTS

HANTAVIRUS (NEW MEXICO): 27 May 2011, A 35-year-old Torrance-County man died after contracting the [a] hantavirus, the New Mexico Department of Health announced Monday [23 May 2011]. The man was the 2nd New Mexico resident to die from [a] hantavirus [infection] this year. A 51-year-old woman from McKinley County died in January. Humans can contract hantavirus[es] when they breath rodent urine, droppings or saliva particles. It is a potentially deadly respiratory virus. "The best defense against being infected with hantavirus[es] is to avoid disturbing areas of rodent infestation, including nests and droppings," Dr. Paul Ettestad, the department's state public health veterinarian, said in a release. "As warmer weather occurs, people should air out their cabins and sheds before entering them for the 1st time." The disease cannot spread from human to human [except for Andes virus in South America] In 2010 there were 2 nonfatal cases of hantavirus [infections] in McKinley County, there were 4 nonfatal cases in New Mexico in 2009, and there were 2 fatal cases in 2008. Since 1975, there have been 86 cases of hantavirus [infections] in New Mexico, which was more than any other state. Of those cases, 8 were in San Juan County and 35 were in McKinley county, according to the department of health. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

MURRAY VALLEY ENCEPHALITIS (AUSTRALIA): 28 May 2011, A toddler and a policeman have become the latest victims of a potentially deadly mosquito-borne disease in Western Australia. The 2-year-old child contracted Murray Valley encephalitis (MVE) in the Kimberley and is now in Royal Darwin Hospital in a stable condition. Constable Ryan Marron, 29, has come out of a coma in a Perth hospital but is still unable to communicate. The policeman contracted the disease during a 2-week relief stint at an Aboriginal community. It is not known whether the pair will fully recover. Last month [April 2011], a man who had been travelling in WA's northwest became the 1st person in the state to die from the disease in 3 years. A 19-year-old Canadian tourist also died after contracting MVE while travelling through the Northern Territory earlier this month. A Health Department spokeswoman said 9 West Australians had contracted MVE this year [2011]. Several people remain very ill in hospital, she said. Medical entomologist Sue Harrington said initial symptoms of MVE include fever, drowsiness, headache, a stiff neck, nausea and dizziness. In severe cases, people could experience fits, lapse into a coma and could be left with permanent brain damage or die, she said. Ms. Harrington said it was important for people to prevent mosquito bites by avoiding outdoor exposure at night, securing insect screens and wearing protective long-sleeve clothing outdoors. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI O1O4 (GERMANY): 28 May 2011, German government officials say 2 more people have died of a bacterial outbreak allegedly caused by contaminated Spanish cucumbers, bringing the number of deaths to 9. German news agency DAPD reported that 2 more women died Saturday [28 May 2011], and almost 300 are sick with hemolytic uremic syndrome, or HUS, in recent days. HUS is a rare complication arising from an infection most commonly associated with E. coli, a bacterium found in undercooked beef or contaminated food. German officials have said they found 3 cucumbers from Spain with the bacterium, and they are currently probing whether the cucumbers were contaminated with_E. coli when they were shipped from southern Spain, or whether they went bad during shipment or while being handled in Germany. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

EBOLA HEMORRHAGIC FEVER (UGANDA): 26 May 2011, Uganda's Health Ministry said on Wednesday [25 May 2011] that the Ebola outbreak in the country is under control, since there is no new confirmed case after the index case on 6 May 2011, according to the Xinhua [News Agency]. The Ministry in a statement issued here [Kampala] said that since the 1st case, a 12-year-old girl who died on 6 May 2011, other suspected cases have turned out to be negative. "The ministry assures the general public that the outbreak is under control as seen in the absence of new confirmed cases. The public is requested to report any suspected cases to the nearest health unit," the statement said. The ministry said that a total of 21 people have been tested at the Uganda Virus Institute Entebbe and all proved negative. It said that experts are continuing to monitor the 25 people who were in contact with the 12-year-old victim to see whether they will develop signs of ebolavirus infection. These contacts on Wednesday [25 May 2011] completed 18 days of follow-up and have 3 more days [before they can be considered to be ebolavirus-free]. The ministry said that other suspected cases reported in the Western District of Kasese and the epicenter [in] Luweero district [Central Region] continue to be monitored. Two isolation units have been set up in Luweero [Central Region and another in Kasese [Western Region]. Ebolavirus is highly contagious and causes a range of symptoms including fever, vomiting, diarrhea, generalized pain or malaise and, in many cases, internal and external bleeding. Mortality rates of Ebola fever are extremely high, with the human case-fatality rate ranging from 50 percent to 89 percent, depending on viral subtype. The last outbreak in Uganda was in late 2007 in the Western district of Bundibugyo. It claimed 37 lives out of the 148 infected. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (HAITI): 24 May 2011, More than 5200 people have died from cholera in Haiti over the last 7 months, said health authorities Sat 21 May 2011. The 1st cases in the Caribbean nation's worst cholera epidemic in a century were detected in the Artibonite province north of the capital Port-au-Prince in October 2010. At least 300,000 people have since been infected, at an estimated rate of 560 per day, according to the latest reports. At least 4 people die of curable waterborne disease every day. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (DOMINICAN REPUBLIC): 24 May 2011, Health officials in the Dominican Republic are reporting hundreds of new cases of cholera as the outbreak spreads through most of the country. Deputy Health Minister Jose Rodriguez says there have been 1143 cases of cholera and 14 deaths since the outbreak began in November [2010]. The number of new cases reported Mon 23 May 2011 is up about 50 percent since the middle of May 2011. The Dominican physicians union says cases have been

confirmed in 28 of the country's 32 provinces. The situation may worsen with the onset of the hurricane season in June 2011. Cholera was detected in the Dominican Republic after an outbreak in neighboring Haiti in October 2010. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CRIMEAN-CONGO HEMORRHAGIC FEVER (KAZAKHSTAN): 23 May 2011, The press service of the Ministry of Emergencies reported that a man born in 1988 has been hospitalized due to Crimean-Congo hemorrhagic fever (CCHF) in the Kyzylorda region. The victim, a resident of Kambash village in Aral region, was admitted to the infectious diseases department of the district hospital on Fri 14 May 2011. Medics confirmed the severe form of the disease. It should be stated that recently a patient with the same diagnosis died in South Kazakhstan region on 11 May 2011. According to the Committee of State Sanitary and Epidemiological Surveillance of the Ministry of Healthcare, the patient had been bitten by a tick during [sheep] shearing. In fact, large scale activities for prevention of the spread of dangerous [tick-borne] diseases have been underway since the beginning of the year by a special commission of the Ministry of Health of the Republic of Kazakhstan working in that region. CCHF is an acute infectious disease of humans transmitted by the bite of ticks, characterized by fever, severe intoxication and bleeding of the skin and internal organs. The causative agent was detected in 1945 [in the Crimea], and a similar disease was found in the Congo in 1956. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Zachary Faigen, MSPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: ZFaigen@dhmh.state.md.us